MEETING MINUTES
INSTITUTIONAL BIOSAFETY COMMITTEE (IBC)
CLEMSON UNIVERSITY
October 6, 2025-Zoom

Call to order at 1:01PM by the Chair, James Morris. The IBC has 10 voting members, and 6 members are required to conduct business. The Chair votes in the event of a tie vote or a need to have a quorum. The Chair is not voting.

Attending: James Morris-IBC Chair
Cassie Gregory-Staff member
Sachin Rustgi-Plant Expert
Daniel Whitehead-Chemical Expert
Matt Breed-University Vet
Cheryl Ingram-Smith-IBC Vice Chair
Kerri Kwist-BSO
Michele Eller, Community Member
Jim Grieger (alternate BSO)
Lesly Pekarek-Occupational Health (ex officio)

Not in Attendance: Rhonda Ryals-Research Security (ex-officio)
Chris Saski-Plant Expert/Gene Drive Expert
Bonnie Kelly, Community Member

In Attendance ORC: Robin Tyndall, ORC Director (ex-officio)
David Huizenga, OGC

Call to Order

- **CONFLICT OF INTEREST**

  All IBC members are reminded of their obligation to disclose any potential conflicts of interest. According to the NIH Guidelines, no member may be involved (except to provide information) in the review or approval of a project in which they have been or expect to be engaged or have a direct financial in the project or its outcomes

I. MINUTES OF LAST MEETING(S)

1. A motion was made and seconded to approve June 2, 2025, meeting minutes.

   Tally: For-7 Against-0 Abstain-0

Motion approved.

2. A motion was made and seconded to approve July 14, 2025, meeting minutes.

   Tally: For-7 Against-0 Abstain-0

   Motion approved.

3. A motion was made and seconded to approve August 14, 2025, meeting minutes.

   Tally: For-7 Against-0 Abstain-0

   Motion approved.

4. A motion was made and seconded to approve September 9, 2025, meeting minutes.

   Tally: For-7 Against-0 Abstain-0

   Motion approved.

II. TRAINING AND ANNOUNCEMENTS

None

II. OLD BUSINESS

1. A letter was developed and sent to previously discussed IBC PI and his chair regarding his lab's noncompliance issues. All IBC members had the opportunity to comment and request changes to the letter. The chair also met with both the PI and the vet in-person regarding how to move forward.

III. NEW PROPOSALS- RECOMBINANT DNA FULL REVIEW

III.a Section III-D - Experiments that Require Institutional Biosafety Committee Approval Before Initiation

IBC2025-0174 Jessica Larsen

Title: Encapsulation of Adenovirus into Polymersomes
Review type: Full Committee
Designated Reviewers: Chair and BSO

Purpose:	The purpose is to encapsulate these adenoviruses in polymer-based nanoparticles called polymersomes to improve their delivery to target cells.
NIH Guidelines:	III-D-3
Biocontainment:	BSL-2
Status:	On agenda for Full Committee Review

Items discussed included: This is an on-going protocol from the Larsen lab. This protocol involves recombinant DNA work that falls under section IIID.3 (whole plants) and biosafety concerns (RG2 organisms). This proposal describes efforts to encapsulate adenovirus particles into polymerosomes (a type of nanoparticle) for improved delivery to cells. The recombinant DNA work (using the recombinant virus that expresses GFP) falls under III.D.3. The adenovirus is an RG2 agent and requires BSL2 containment. Human adenovirus type 5-Ad5FDgT is a recombinant virus that expresses eGFP. The nanoparticles are polyethylene glycol derivatives and are minimally hazardous.

A motion was made to table the protocol.

Tally: For-7 Against-0 Abstain-0

Motion approved

IBC2025-0189 **Renee Cottle**

Title:	Nonviral Delivery of CRISPR-Cas9 into Hepatocytes Combined with APAP Selection for Treatment of Familial Hypercholesterolemia
Review type:	Full Committee
Designated Reviewers:	Chair and BSO
Purpose:	The purpose is to apply gene editing nucleases for precisely and permanently modifying sites within the genome related to genetic diseases,
NIH Guidelines:	III-D-3, III-E-3, III-F-8
Biocontainment:	BSL-1,2/ABSL-1
Status:	On agenda for Full Committee Review

Items discussed included: This is an on-going protocol from the Cottle lab. This proposal comes to us from Dr. Cottle in BioE and describes experiments to use Cas9 to alter cell genomes as a therapy for rare genetic diseases. It involves the use of biohazards (human cells, RG2) and includes recombinant DNA work involving gene editing. Plasmids bearing CRISPR-Cas9 will be delivered to human or rodent cells by electroporation, nanoparticle (lipoid), or adeno-associated virus (AAV, RG2) for editing genes related to rare diseases. As part

of this work, edited mouse cells will then be engrafted back into mice and the transplanted mice scored for gene-modified hepatocytes. The AAVs will be provided by a CRO and are generally considered safe, particularly at the concentrations being used here.

A motion was made to approve the protocol.

Tally: For-7 Against-0 Abstain-0

Motion approved

III.b Section III-E - Experiments that Require Institutional Biosafety Committee Notification Simultaneously with Initiation

None

IV. NEW RECOMBINANT DNA PROTOCOLS THAT ARE EXEMPT REVIEW (SECTION III-F OR APPENDIX C)

None

V. NEW PROPOSALS NOT INVOLVING RECOMBINANT DNA REQUIRING FULL COMMITTEE REVIEW

None

VI. NEW BUSINESS

1. Report of Actions was reviewed and accepted by the committee.
2. A doodle will be sent out to change day and time of IBC meetings after conflicts were reported.
3. The BSO reported:
    - No rDNA spills or accidents
    - 2 autoclaves that were thought to be certified were not. This has been remedied.

- Autoclaved liquid waste was spilled-no one had logged using autoclave so no record of what the waste was. Retraining of personnel was completed focusing on packaging materials correctly and logging.

4. The Occupational Health Office reported:
   - No rDNA accidents
   - There will be an MUSC-Occupational health partnership-administrative work is going on in the background.

VII. NEXT MEETING

Tuesday, November 4, 2025 at 2pm

VIII. ADJOURNMENT

A motion was made to adjourn at 1:31pm.

Approved by:

_____ _____

James Morris, Ph.D. Date
Chair, Institutional Biosafety Committee
Professor, Genetics and Biochemistry